What is claimed is:

1. A pickup device of an apparatus for recording or reproducing information, by irradiation of a light beam, to and from a multi-layered recording medium having a plurality of recording layers laminated through spacer layers and formed on the recording layer a pre-pit region having a reflectivity different from a reflectivity of the surrounding, the device comprising:

an illumination optical system including an objective lens for focusing a light beam onto any of said recording layers of said multi-layered recording medium; and

a detecting optical system including a photodetector for receiving and photoelectrically converting reflection light from said recording layer of said multi-layered recording medium through said objective lens; wherein said photodetector has a normalized detector size of a size of 10 $\mu m^2$ to 50 $\mu m^2$.

2. A device according to claim 1, wherein said multi-layered recording medium is in a disc form, said pre-pit region being arranged in a spoke form extending from a disc center.

3. A device according to claim 1, wherein said multi-layered recording medium is in a disc form, said pre-pit region being arranged periodically along a disc circumferential direction.

4. A device according to claim 1, wherein said objective lens has a numerical aperture of 0.85 or greater.

5. A device according to claim 1, wherein said spacer layer has a thickness of 10 $\mu m$ to 30 $\mu m$.